

We claim:-

1. A process for the production of paper, board and cardboard by shearing the paper stock, adding a microparticle system comprising a cationic polymer and a finely divided inorganic component to the paper stock after the last shearing stage before the head box, draining the paper stock with sheet formation and drying the sheets, wherein cationic polyacrylamides, polymers containing vinylamine units and/or polydiallyldimethylammonium chloride having an average molar mass Mw of in each case at least 500 000 Dalton and a charge density of in each case not more than 4.0 meq/g are used as cationic polymers of the microparticle system, the microparticle system used as a retention aid being free of polymers having a charge density of more than 4 meq/g.
2. A process as claimed in claim 1, wherein cationic polyacrylamides having an average molar mass Mw of at least 5 million Dalton and a charge density of from 0.1 to 3.5 meq/g are used as cationic polymers of the microparticle system.
3. A process as claimed in claim 1, wherein polyvinylamines which are obtainable by hydrolysis of polymers containing vinylformamide units, the degree of hydrolysis of the vinylformamide units being from 20 to 100 mol% and the average molar mass of the polyvinylamines being at least 2 million Dalton, are used as cationic polymers of the microparticle system.
4. A process as claimed in any of claims 1 to 3, wherein the cationic polymer of the microparticle system is added to the paper stock in an amount of from 0.005 to 0.5% by weight, based on dry paper stock.
5. A process as claimed in any of claims 1 to 4, wherein the cationic polymer of the microparticle system is added to the paper stock in an amount of from 0.01 to 0.2% by weight, based on dry paper stock.

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6. A process as claimed in any of claims 1 to 5, wherein at least one bentonite, colloidal silica, silicate and/or calcium carbonate is used as the inorganic component of the microparticle system.

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7. A process as claimed in any of claims 1 to 6, wherein the inorganic component of the microparticle system is added to the paper stock in an amount of from 0.01 to 1.0% by weight, based on dry paper stock.

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8. A process as claimed in any of claims 1 to 7, wherein the inorganic component of the microparticle system is added to the paper stock in an amount of from 0.1 to 0.5% by weight, based on dry paper stock.

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9. A process as claimed in any of claims 1 to 8, wherein first the cationic polymer and then the inorganic component of the microparticle system are metered into the paper stock.

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